MSDS 088393 REV **02/15/2000**



MATERIAL SAFETY DATA SHEET

PRODUCT

NALCO 8735

EMERGENCY TELEPHONE NUMBER

(800)462-5378 (24 Hours) (800) I-M-ALERT

CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:

NALCO 8735

APPLICATION:

pH STABILIZER

CHEMICAL DESCRIPTION:

Caustic, Water

COMPANY IDENTIFICATION:

Nalco Chemical Company

One Nalco Center Naperville, Illinois 60563-1198

EMERGENCY TELEPHONE NUMBER:

(800)462-5378 (24 Hours)

(800) I-M-ALERT

NFPA 704M/HMIS RATING

HEALTH: 3/3 FLAMMABILITY: 0/0

REACTIVITY:

1/1

OTHER:

0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme

2. **COMPOSITION/INFORMATION ON INGREDIENTS**

Our hazard evaluation has identified the following chemical substance(s) as hazardous. Consult Section 15 for the nature of the hazard(s).

Hazardous Substance(s)

CAS NO

% (w/w)

Sodium Hydroxide Potassium Hydroxide 1310-73-2

30.0 - 60.0

1310-58-3

10.0 - 30.0

3. HAZARDS IDENTIFICATION

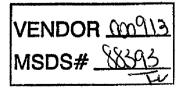
EMERGENCY OVERVIEW

DANGER

Corrosive. May cause tissue damage.

Do not get in eyes, on skin, on clothing. Do not take internally. Use with adequate ventilation. Keep container tightly closed and in a well-ventilated place. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of water. Protect product from freezing. Wear a face shield. Wear chemical resistant apron, chemical splash goggles, impervious gloves and boots. Not flammable or combustible. Contact with reactive metals (e.g. aluminum) may result in the generation of flammable hydrogen gas.

PRIMARY ROUTES OF EXPOSURE: Eye, Skin



Natco Chemical Company One Nalco Center • Naperville, Illinois 60563-1198 (630)305-1000 1/10

2



MATERIAL SAFETY DATA SHEET

PRODUCT

NALCO 8735

EMERGENCY TELEPHONE NUMBER

(800)462-5378 (24 Hours) (800) I-M-ALERT

HUMAN HEALTH HAZARDS - ACUTE:

EYE CONTACT:

Corrosive. Will cause eye burns and permanent tissue damage.

SKIN CONTACT:

May cause severe irritation or tissue damage depending on the length of exposure and the type of first aid administered.

INGESTION:

Not a likely route of exposure. Corrosive; causes chemical burns to the mouth, throat and stomach.

INHALATION:

Not a likely route of exposure. Irritating, in high concentrations, to the eyes, nose, throat and lungs.

SYMPTOMS OF EXPOSURE:

Acute:

A review of available data does not identify any symptoms from exposure not previously mentioned.

Chronic:

A review of available data does not identify any symptoms from exposure not previously mentioned.

AGGRAVATION OF EXISTING CONDITIONS:

A review of available data does not identify any worsening of existing conditions.

4. FIRST AID MEASURES

EYE CONTACT:

PROMPT ACTION IS ESSENTIAL IN CASE OF CONTACT. Immediately flush eye with water for at least 15 minutes while holding eyelids open. Get immediate medical attention.

SKIN CONTACT:

Immediately flush with plenty of water for at least 15 minutes. For a large splash, flood body under a shower. Remove contaminated clothing. Wash off affected area immediately with plenty of water. Get immediate medical attention. Contaminated clothing, shoes, and leather goods must be discarded or cleaned before re-use.

INGESTION:

DO NOT INDUCE VOMITING. If conscious, washout mouth and give water to drink. Get immediate medical attention.

INHALATION:

Remove to fresh air, treat symptomatically. Get medical attention.

NOTE TO PHYSICIAN:

Probable mucosal damage may contraindicate the use of gastric lavage. Based on the individual reactions of the patient, the physician's judgement should be used to control symptoms and clinical condition.

20001

Nalco Chemical Company One Nalco Center • Naperville, Illinois 60563-1198 (630)305-1000

. 2 / 10

Image Data From SunHealth



MATERIAL SAFETY DATA SHEET

PRODUCT

NALCO 8735

EMERGENCY TELEPHONE NUMBER

(800)462-5378 (24 Hours) (800) I-M-ALERT

5. FIRE FIGHTING MEASURES

FLASH POINT: . . .

_ None

This product does not sustain combustion; therefore, it does not meet the definition of hazard class 3 for transportation.

EXTINGUISHING MEDIA:

Not expected to burn. Use extinguishing media appropriate for surrounding fire.

FIRE AND EXPLOSION HAZARD:

Not flammable or combustible. Contact with reactive metals (e.g. aluminum) may result in the generation of flammable hydrogen gas.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTING:

In case of fire, wear a full face positive-pressure self contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:

Restrict access to area as appropriate until clean-up operations are complete. Ensure clean-up is conducted by trained personnel only. Ventilate spill area if possible. Do not touch spilled material. Stop or reduce any leaks if it is safe to do so. Use personal protective equipment recommended in Section 8 (Exposure Controls/Personal Protection). Notify appropriate government, occupational health and safety and environmental authorities.

METHODS FOR CLEANING UP:

SMALL SPILLS: Soak up spill with absorbent material. Place residues in a suitable, covered, properly labeled container. Wash affected area. LARGE SPILLS: Contain liquid using absorbent material, by digging trenches or by dyking. Reclaim into recovery or salvage drums or tank truck for proper disposal. Wash site of spillage thoroughly with water. Contact an approved waste hauler for disposal of contaminated recovered material. Dispose of material in compliance with regulations indicated in Section 13 (Disposal Considerations).

ENVIRONMENTAL PRECAUTIONS:

Do not contaminate surface water.

7. HANDLING AND STORAGE

HANDLING:

Do not get in eyes, on skin, on clothing. Do not take internally. Use with adequate ventilation. Avoid generating aerosols and mists. Do not mix with acids. Keep the containers closed when not in use. Have emergency equipment (for fires, spills, leaks, etc.) readily available.

STORAGE CONDITIONS:

Store the containers tightly closed. Store separately from acids. Store in suitable labelled containers.

UNSUITABLE CONSTRUCTION MATERIAL:

Aluminum, Zinc, Galvanised metals, Tin

Nalco Chemical Company One Nalco Center • Naperville, Illinois 60563-1198 (630)305-1000

3/10

43



MATERIAL SAFETY DATA SHEET

PRODUCT

NALCO 8735

EMERGENCY TELEPHONE NUMBER

(800)462-5378 (24 Hours) (800) I-M-ALERT

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OCCUPATIONAL EXPÓSURE LIMITS:

Exposure guidelines have not been established for this product. Available exposure limits for the substance(s) are shown below.

ACGIH/TLV:

Substance(s)

Sodium Hydroxide

CEILING: 2 mg/m3

Potassium Hydroxide

CEILING: 2 mg/m3

OSHA/PEL:

Substance(s)

Sodium Hydroxide

CEILING: 2 mg/m3

Potassium Hydroxide

CEILING: 2 mg/m3

ENGINEERING MEASURES:

General ventilation is recommended. Use local exhaust ventilation if necessary to control airborne mist and vapor.

RESPIRATORY PROTECTION:

If significant mists, vapors or aerosols are generated an approved respirator is recommended. A dust, mist, fume cartridge may be used. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

HAND PROTECTION:

Neoprene gloves, Nitrile gloves, PVC gloves, Butyl gloves, Rubber gloves

SKIN PROTECTION:

Wear chemical resistant apron, chemical splash goggles, impervious gloves and boots. A full slicker suit is recommended if gross exposure is possible.

EYE PROTECTION:

Wear a face shield with chemical splash goggles.

HYGIENE RECOMMENDATIONS:

Eye wash station and safety shower are necessary. If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse.

HUMAN EXPOSURE CHARACTERIZATION:

Based on our recommended product application and personal protective equipment, the potential human exposure is: Low

Nalco Chemical Company One Nalco Center • Naperville, Illinois 60563-1198 (630)305-1000

Image Data From SunHealth

65



MATERIAL SAFETY DATA SHEET

PRODUCT

NALCO 8735

EMERGENCY TELEPHONE NUMBER

(800)462-5378 (24 Hours) (800) I-M-ALERT

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE

Liquid

APPEARANCE

Colorless

ODOR

None

SPECIFIC GRAVITY

1.50 - 1.53 @ 70 °F / 21.1 °C

DENSITY

12.5 - 12.7 lb/gal

SOLUBILITY IN WATER

Complete

pH (5 %)

14

FREEZING POINT

-10 °F / -23 °C

BOILING POINT

293 °F / 145 °C

10. STABILITY AND REACTIVITY

STABILITY:

Stable under normal conditions.

HAZARDOUS POLYMERIZATION:

Hazardous polymerization will not occur.

CONDITIONS TO AVOID:

Freezing temperatures

MATERIALS TO AVOID:

Contact with strong acids (e.g. sulfuric, phosphoric, nitric, hydrochloric, chromic, sulfonic) may generate heat, splattering or boiling and toxic vapors. Gives off hydrogen by reaction with metals.

HAZARDOUS DECOMPOSITION PRODUCTS:

Under fire conditions:

None known.

11. TOXICOLOGICAL INFORMATION

The following results are for the hazardous substances.

ACUTE ORAL TOXICITY:

Species

LD50

Tested Substance

Rat 205 mg/kg

Potassium Hydroxide

Rating: Toxic

ACUTE DERMAL TOXICITY:

Species

LD50

Rabbit

1,260 mg/kg

Tested Substance

Potassium Hydroxide

Rating: Non-Hazardous

Nalco Chemical Company One Nalco Center • Naperville, Illinois 60563-1198 (630)305-1000

5/10



MATERIAL SAFETY DATA SHEET

PRODUCT

NALCO 8735

EMERGENCY TELEPHONE NUMBER

(800)462-5378 (24 Hours) (800) I-M-ALERT

CARCINOGENICITY:

None of the substances in this product are listed as carcinogens by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP) or the American Conference of Governmental Industrial Hygienists (ACGIH).

HUMAN HAZARD CHARACTERIZATION:

Based on our hazard characterization, the potential human hazard is: High

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL EFFECTS: __

No toxicity studies have been conducted on this product.

PERSISTENCY AND DEGRADATION:

Chemical Oxygen Demand (COD): < 100 mg/s

Biological Oxygen Demand (5 Day BOD): 2.0 mg/

The product does not contain any organic substances.

ENVIRONMENTAL HAZARD AND EXPOSURE CHARACTERIZATION

Based on our hazard characterization, the potential environmental hazard is: Moderate Based on our recommended product application and the product's characteristics, the potential environmental exposure is: High

If released into the environment, see CERCLA/SUPERFUND in Section 15.

13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it could meet the criteria of a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Before disposal, it should be determined if the waste meets the criteria of a hazardous waste.

Hazardous Waste: D002

Hazardous wastes must be transported by a licensed hazardous waste transporter and disposed of or treated in a properly licensed hazardous waste treatment, storage, disposal or recycling facility. Consult local, state, and federal regulations for specific requirements.

14. TRANSPORT INFORMATION

Proper Shipping Name / Hazard Class may vary by packaging, properties, and mode of transportation. Typical Proper Shipping Names for this product are:

Nalco Chemical Company One Nalco Center • Naperville, Illinois 60563-1198 (630)305-1000 6 / 10

Image Data From SunHealth

1



MATERIAL SAFETY DATA SHEET

PRODUCT

NALCO 8735

EMERGENCY TELEPHONE NUMBER

(800)462-5378 (24 Hours) (800) I-M-ALERT

LAND TRANSPORT:

Proper Shipping Name:

CAUSTIC ALKALI LIQUID, N.O.S.

Technical Name(s):

SODIUM HYDROXIDE, POTASSIUM HYDROXIDE

UN/ID No: Hazard Class - Primary: Packing Group:

1719 8 Ш None

Flash Point: DOT Reportable Quantity (per package):

2.900 lbs

DOT RQ Component:

SODIUM HYDROXIDE

AIR TRANSPORT (ICAO/IATA):

Proper Shipping Name:

CAUSTIC ALKALI LIQUID, N.O.S.

Technical Name(s): UN/ID No: 1719

SODIUM HYDROXIDE, POTASSIUM HYDROXIDE

8

Hazard Class - Primary: Packing Group:

П IATA Cargo Packing Instructions: 813

IATA Cargo Aircraft Limit: 30 L (Max net quantity per package)

MARINE TRANSPORT (IMDG/IMO):

IMDG Page:

8136

Proper Shipping Name:

CAUSTIC ALKALI LIQUID, N.O.S.

Technical Name(s):

SODIUM HYDROXIDE, POTASSIUM HYDROXIDE

UN/ID No: Hazard Class - Primary:

1719 8

Packing Group:

II

15. REGULATORY INFORMATION

NATIONAL REGULATIONS, USA:

OSHA HAZARD COMMUNICATION RULE, 29 CFR 1910.1200:

Based on our hazard evaluation, the following substance(s) in this product is/are hazardous and the reason(s) is/are

shown below.

Sodium Hydroxide: Corrosive

Potassium Hydroxide: Corrosive

CERCLA/SUPERFUND, 40 CFR 117, 302:

This product contains the following Reportable Quantity (RQ) Substance. Also listed is the RQ for the product.

RQ Substance

Sodium Hydroxide Potassium Hydroxide 2,900 lbs 2,900 lbs

Nalco Chemical Company One Nalco Center • Naperville, Illinois 60563-1198 (630)305-1000

7/10

Image Data From SunHealth



MATERIAL SAFETY DATA SHEET

PRODUCT

NALCO 8735

EMERGENCY TELEPHONE NUMBER

(800)462-5378 (24 Hours) (800) I-M-ALERT

SARA/SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (TITLE III) - SECTIONS 302, 311, 312, AND 313:

SECTION 302 - EXTREMELY HAZABDOUS SUBSTANCES (40 CFR 355):

This product does not contain substances listed in Appendix A and B as an Extremely Hazardous Substance.

SECTIONS 311 AND 312 - MATERIAL SAFETY DATA SHEET REQUIREMENTS (40 CFR 370):

Our hazard evaluation has found this product to be hazardous. The product should be reported under the following EPA hazard categories:

X Immediate (Acute) Health Hazard
- Delayed (Chronic) Health Hazard

Fire Hazard _____

- Sudden Release of Pressure Hazard

Reactive Hazard

Under SARA 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are: 500 pounds or the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

SECTION 313 - LIST OF TOXIC CHEMICALS (40 CFR 372):

This product does not contain substances on the List of Toxic Chemicals.

TOXIC SUBSTANCES CONTROL ACT (TSCA):

The chemical substances in this product are on the TSCA 8(b) Inventory (40 CFR 710).

FOOD AND DRUG ADMINISTRATION (FDA) Federal Food, Drug and Cosmetic Act:

When use situations necessitate compliance with FDA regulations, this product is acceptable under: 21 CFR 173.310 Boiler Water Additives

U.S. DEPARTMENT OF AGRICULTURE (USDA):

USDA Inspection and Grading Programs - Food Safety and Inspection Service:

This product is authorized by USDA for use in federally inspected meat and poultry plants. Authorized use is under category: G1, G6

This product has been certified as KOSHER/PAREVE for year-round use EXCEPT FOR THE PASSOVER SEASON by the CHICAGO RABBINICAL COUNCIL.

FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 401.15 / formerly Sec. 307, 40 CFR / formerly Sec. 311 :

This product contains_the following substances listed in the regulation:

Substance(s)

<u>Citations</u>

Sodium Hydroxide:

Sec. 311

CLEAN AIR ACT, Sec. 111 (40 CFR 60, Volatile Organic Compounds), Sec. 112 (40 CFR 61, Hazardous Air Pollutants), Sec. 602 (40 CFR 82, Class I and II Ozone Depleting Substances): None of the substances are specifically listed in the regulation.

Naico Chemical Company One Nalco Center • Naperville, Illinois 60563-1198 (630)305-1000

8/10

9



MATERIAL SAFETY DATA SHEET

PRODUCT

NALCO 8735

EMERGENCY TELEPHONE NUMBER

(800)462-5378 (24 Hours) (800) I-M-ALERT

CALIFORNIA PROPOSITION 65:

This product does not contain substances which require warning under California Proposition 65.

MICHIGAN CRITICAL MATERIALS:

None of the substances are specifically listed in the regulation.

STATE RIGHT TO KNOW LAWS:

The following substances are disclosed for compliance with State Right to Know Laws:

Potassium Hydroxide

1310-58-3

Sodium Hydroxide

1310-73-2

Water

7732-18-5

NATIONAL REGULATIONS, CANADA:

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS):

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS CLASSIFICATION:

E - Corrosive Material

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA):

All substances in this product are listed on the Domestic Substances List (DSL), are exempt, or have been reported in accordance with the New Substances Notification Regulations.

16. OTHER INFORMATION

Due to our commitment to Product Stewardship, we have evaluated the human and environmental hazards and exposures of this product. Based on our recommended use of this product, we have characterized the product's general risk. This information should provide assistance for your own risk management practices. We have evaluated our product's risk as follows:

- * The human risk is: Low
- * The environmental risk is: Moderate

Any use inconsistent with our recommendations may affect the risk characterization. Our sales representative will assist you to determine if your product application is consistent with our recommendations. Together we can implement an appropriate risk management process.

This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to insure safe workplace operations. Please consult your local sales representative for any further information.

REFERENCES

Nalco Chemical Company One Nalco Center • Naperville, Illinois 60563-1198 (630)305-1000 9/10

. . . . 10



MATERIAL SAFETY DATA SHEET

PRODUCT

NALCO 8735

EMERGENCY TELEPHONE NUMBER

(800)462-5378 (24 Hours) (800) I-M-ALERT

Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices, American Conference of Governmental Industrial Hygienists, OH., (Ariel Insight™ CD-ROM Version), Ariel Research Corp., Bethesda, MD.

Hazardous Substances Data Bank, National Library of Medicine, Bethesda, Maryland (TOMES CPS™ CD-ROM Version), Micromedex, Inc., Englewood, Co.

IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man, Geneva: World Health Organization, International Agency for Research on Cancer.

Integrated Risk Information System, U.S. Environmental Protection Agency, Washington, D.C. (TOMES CPS™ CD-ROM Version), Micromedex, Inc., Englewood, CO.

Annual Report on Carcinogens, National Toxicology Program, U.S. Department of Health and Human Services, Public Health Service.

Title 29 Code of Federal Regulations, Part 1910, Subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration (OSHA), (Ariel Insight™ CD-ROM Version), Ariel Research Corp., Bethesda MD.

Registry of Toxic Effects of Chemical Substances, National Institute for Occupational Safety and Health, Cincinnati, OH, (TOMES CPS™ CD-ROM Version), Micromedex, Inc., Englewood, CO.

Ariel InsightTM (An integrated guide to industrial chemicals covered under major regulatory and advisory programs), North American Module, Western European Module, Chemical Inventories Module and the Generics Module (Ariel Insight™ CD-ROM Version), Ariel Research Corp., Bethesda, MD.

The Teratogen Information System, University of Washington, Seattle, WA (TOMES CPS™ CD-ROM Version), Micromedex, Inc., Englewood, CO

Prepared By: Product Safety Department

Date issued: 02/15/2000 V

Replaces: 10/06/1998

Nalco Chemical Company One Nalco Center • Naperville, Illinois 60563-1198 (630)305-1000 10 / 10

B-DUW2-30330980